

We claim:

1. A test device comprising a plate containing a multiplicity of wells wherein the wells have a volume within the range of 0.1-20 microliter, said test device being grafted with hydroxymethylmethacrylate.
2. A test device according to claim 1 wherein the wells have a volume within the range of 0.1-5 microliter.
3. A test device according to claim 1 wherein the ratio between the depth of the wells and the diameter thereof is less than 1:1.
4. A test device according to claim 3, wherein said ratio is less than 2:3.
5. A test device according to claim 1 wherein the diameter of the wells is 1.0-4.0 mm.
6. A test device according to claim 5, wherein said diameter is 1.0-2.0 mm.
7. A test device according to claim 1 wherein the plate contains 5-20 wells per square centimeter.
8. A test device according to claim 1, wherein the plate contains 10-15 wells per square centimeter.
9. A test device comprising a plate containing a multiplicity of wells wherein the wells have a volume within the range of 0.1-20

microliter, said device comprising a library of peptide constructs each comprising a first peptide segment linked via a non-peptide bond to a second segment.

10. A test device according to claim 9 wherein said peptide constructs each comprise at least 18 amino acids.

11. A test device according to claim 10 wherein said peptide constructs each comprise from 25 to 35 amino acids.

12. A method for synthesizing a library of peptides comprising

synthesizing a first segment of said peptide in a first test device according to claim 1,

synthesizing a second segment of said peptide in a second test device comprising a plate containing a multiplicity of wells wherein the wells have a volume within the range of 0.1-20 microliter,

subjecting said first test device to a gaseous phase comprising trifluoric acid and cleaving peptide material from the first test device, and

distributing peptide material from said first test device to said second test device under conditions wherein peptide material from said first test device forms a bond with peptide material in said second test device.

13. A method according to claim 12 wherein said bond comprises a thioether bond.